

functionality. Whether such functionality can be implemented as hardware or software depends upon the particular application and design constraints imposed on the overall system. Skilled artisans may implement the described functionality in varying ways for each particular application, but such implementation decisions should not be interpreted as causing a departure from the scope of the present invention.

The various illustrative logical blocks, modules, and circuits described in connection with the embodiments disclosed herein may be implemented or performed with a general purpose processor, a digital signal processor (DSP), an application specific integrated circuit (ASIC), a field programmable gate array (FPGA) or other programmable logic device, discrete gate or transistor logic, discrete hardware components, or any combination thereof designed to perform the functions described herein. A general purpose processor may be a microprocessor, but in the alternative, the processor may be any conventional processor, controller, microcontroller, or state machine. A processor may also be implemented as a combination of computing devices, e.g., a combination of a DSP and a microprocessor, a plurality of microprocessors, one or more microprocessors in conjunction with a DSP core, or any other such configuration.

The steps of a method or algorithm described in connection with the embodiments disclosed herein may be embodied directly in hardware, in a software module executed by a processor, or in a combination of the two. A software module may reside in RAM memory, flash memory, ROM memory, EPROM memory, EEPROM memory, registers, hard disk, a removable disk, a CD-ROM, or any other form of storage medium known in the art. An exemplary storage medium can be coupled to the processor such the processor can read information from, and write information to, the storage medium. In the alternative, the storage medium may be integral to the processor. The processor and the storage medium may reside in an ASIC. The ASIC may reside in a user terminal. In the alternative, the processor and the storage medium may reside as discrete components in a user terminal.

The previous description of the disclosed embodiments is provided to enable any person skilled in the art to make or use the present invention. Various modifications to these embodiments will be readily apparent to those skilled in the art, and the generic principles defined herein may be applied to other embodiments without departing from the spirit or scope of the invention. For example, although the description specifies that the radio access network 20 can be implemented using the Universal Terrestrial Radio Access Network (UTRAN) air interface, alternatively, in a GSM/GPRS system, the access network 20 could be a GSM/EDGE Radio Access Network (GERAN), or in an inter-system case it could be comprise cells of a UTRAN air interface and cells of a GSM/EDGE air interface. Thus, the present invention is not intended to be limited to the embodiments shown herein but is to be accorded the widest scope consistent with the principles and novel features disclosed herein.

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What is claimed is:

1. A system for transmitting information blocks, comprising:
  - a destination station comprising a decoder, the decoder configured to receive particular content from a first

source and transition to receive a remainder of the particular content from a second source;

the first source of the particular content transmitting first outer blocks for receipt by the destination station, the first outer blocks including information blocks and redundancy blocks generated above the radio link control layer that can be used to reconstruct the information blocks;

the second source of the particular content transmitting second outer blocks comprising information blocks for receipt by the destination station when the destination station undergoes the transition between the first source and the second source,

wherein the decoder is further configured to reconstruct any information blocks of the second outer blocks lost during the transition and avoid decoding duplicate information blocks using the redundancy blocks; and

wherein the transmission rate of the information blocks from the second source of the particular content is greater than the transmission rate of the information blocks from the first source of the particular content, and wherein the second source of the particular content starts transmission at a first information block of the first outer block being transmitted when the transition occurs to thereby reduce loss of information blocks during the transition.

2. A system according to claim 1, wherein the second source of the particular content retransmits a second outer block over a dedicated channel if any information blocks from the second outer block are not received correctly during another transition from the second source of the particular content to the first source of the particular content.

3. A system according to claim 1, wherein each block occupies one frame.

4. A system according to claim 1, wherein the destination station is further configured to combine the information blocks received from the first source of the particular content and the information blocks received from the second source to produce the complete outer block, when the transition occurs while the same outer block is being transmitted from each source.

5. A system according to claim 1, wherein the first source of the particular content includes a Reed-Solomon encoder that encodes the information blocks to generate the redundancy blocks, and adds the redundancy blocks to the information blocks to generate outer code blocks.

6. A system according to claim 1, wherein the first outer blocks comprise sequence numbers identifying a sequence of inner blocks within the first outer blocks and the second outer blocks comprise corresponding sequence numbers for inner blocks of the second outer blocks, the decoder configured to combine the first outer blocks with the second outer blocks using the sequence numbers.

7. A system for transmitting information blocks, comprising:

a destination station comprising a decoder;

a first source of a particular content that transmits first outer blocks over a common channel for receipt by the destination station using a first data transfer mode, wherein the first outer blocks include information blocks and redundancy blocks that can be used to reconstruct the information blocks, wherein the redundancy blocks are generated above a radio link control layer; and

a second source of the particular content that transmits second outer blocks comprising information blocks over a dedicated channel for receipt by the destination station using a second data transfer mode when the destination